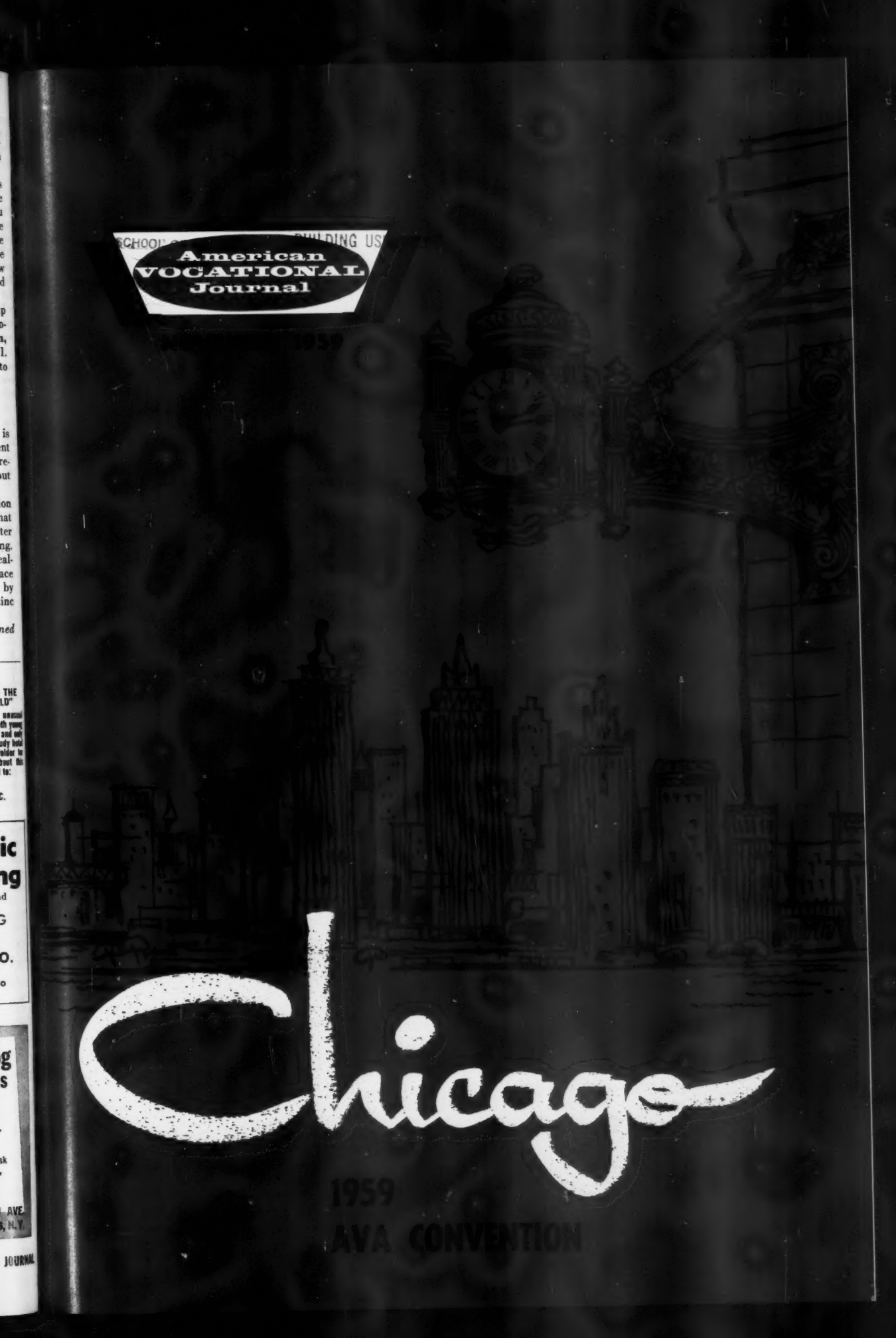
American
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Chicago
1959
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American VOCATIONAL Journal

VOLUME 34, NUMBER 8 • NOVEMBER 1959

THE JOURNAL FOR NOVEMBER

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The Cover: Plans for AVA's big convention in Chicago, Dec. 7-11, are now complete. All AVA members who are planning to attend can look forward to outstanding programs, top flight speakers, a tremendous array of commercial exhibits, and plenty of Chicago's famous hospitality. See pages 14-17 for a brief resumé of program plans. And be sure to use the reservation blank in this issue—hotel accommodations are going fast!

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5

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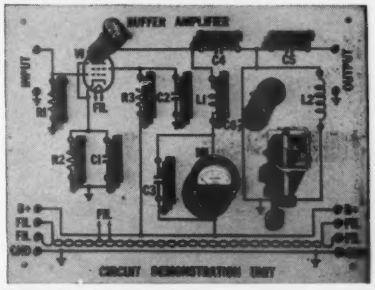

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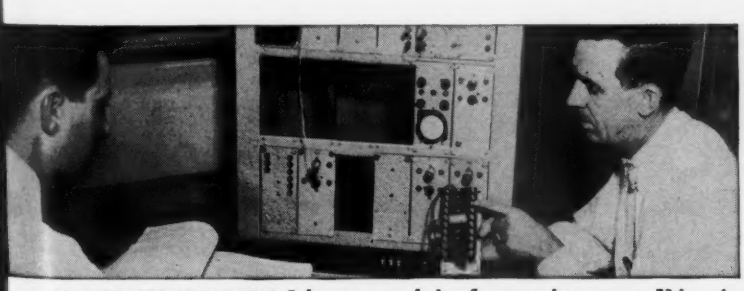

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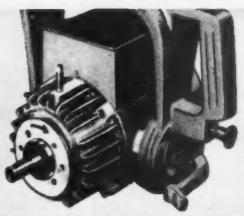
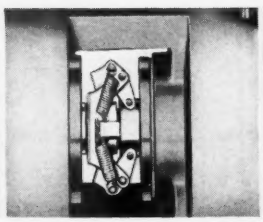
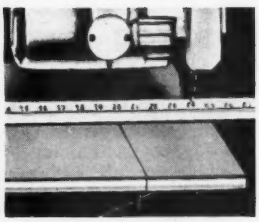


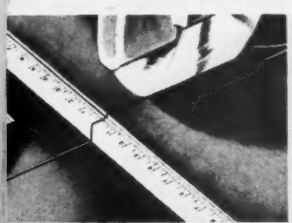
NEW! TOTALLY-ENCLOSED, DIRECT-DRIVE MOTOR, runs on 120/240 volts, AC.



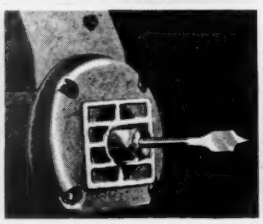
NEW! BUILT-IN ROTO-GRIP Brake, stops tools with electro-mechanical action.



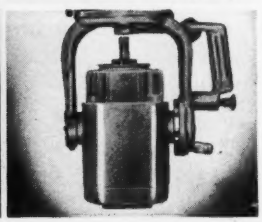
NEW! DROP-LEAF SAF-T-TABLE up front protects operator on wide cuts. (optional)



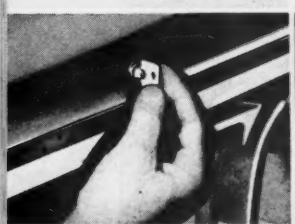
NEW! CUT-OFF SCALE on guide fence makes "repeat" cross-cuts easy.



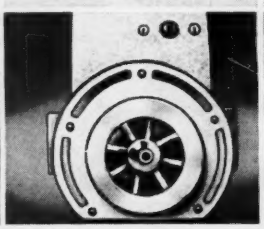
NEW! DUAL-ARBOR MOTOR SHAFT uses right hand tools on back end arbor.



NEW! MOTOR TILTS FULL 360°, multiplies range of shop jobs, adds flexibility.



NEW! "CAM-TYPE" SAFETY KEY SWITCH, works in any direction, protects your students.



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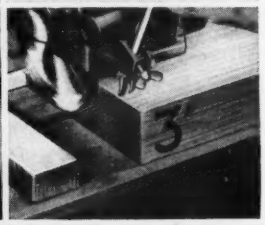

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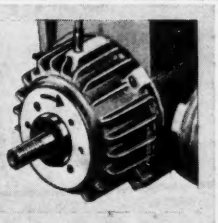

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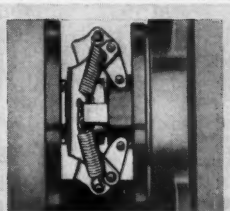

BUILT-IN ROTO-GRIP BRAKE
stops motor instantly
EXTRA SAFETY FOR STUDENTS!

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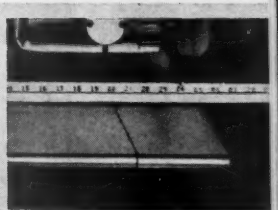

DROP-LEAF SAFETY TABLE
eliminates exposed saw up-front
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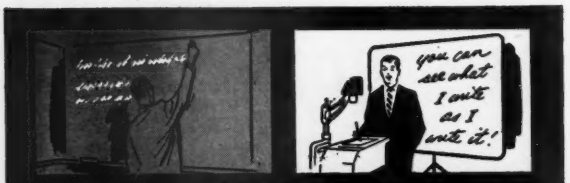
come out of the shadows . . . INTO THE LIGHT



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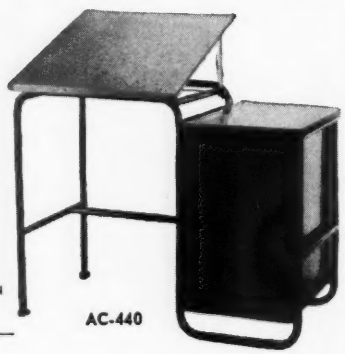

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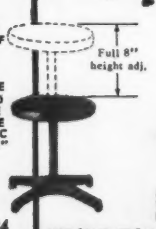

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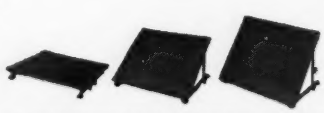

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applause

—to members of the Auto Mechanics Club, Warren Harding High School, Warren, Ohio, one of six youth groups in the nation to receive the Circle of Safety Award of Excellence for its part in the National Safety-Check Program. More than 6,000 youth groups participated in the program. Congratulations have been extended to the Warren club by Governor Michael V. DiSalle and Grant Keys, Director of Highway Safety.

This is the second straight year Warren has had national recognition in the Safety-Check program. Instructors are Paul Pritchard and John Wolfe.

* * *

—to L. Garcia Hernandez, Director of Vocational Education in Puerto Rico, and others responsible for the production of *Vocational Education—Twenty-five Years of Service to the People of Puerto Rico.* This 60-page, illustrated brochure, published in Spanish and English, covers the most important achievements of the vocational education program in Puerto Rico during the period of 1932-1957.

* * *

—to Dr. Harry W. Sanders, Professor and Head, Vocational Education Department, Virginia Polytechnic Institute who, in the October issue of Virginia Vocational News points out that the following five points should serve as guides for teachers who would set up codes for themselves:

A good teacher will set goals; a good teacher will be well prepared; a good teacher will inspire and motivate students; a good teacher will base his decisions on fact; and a good teacher will set an example professionally.

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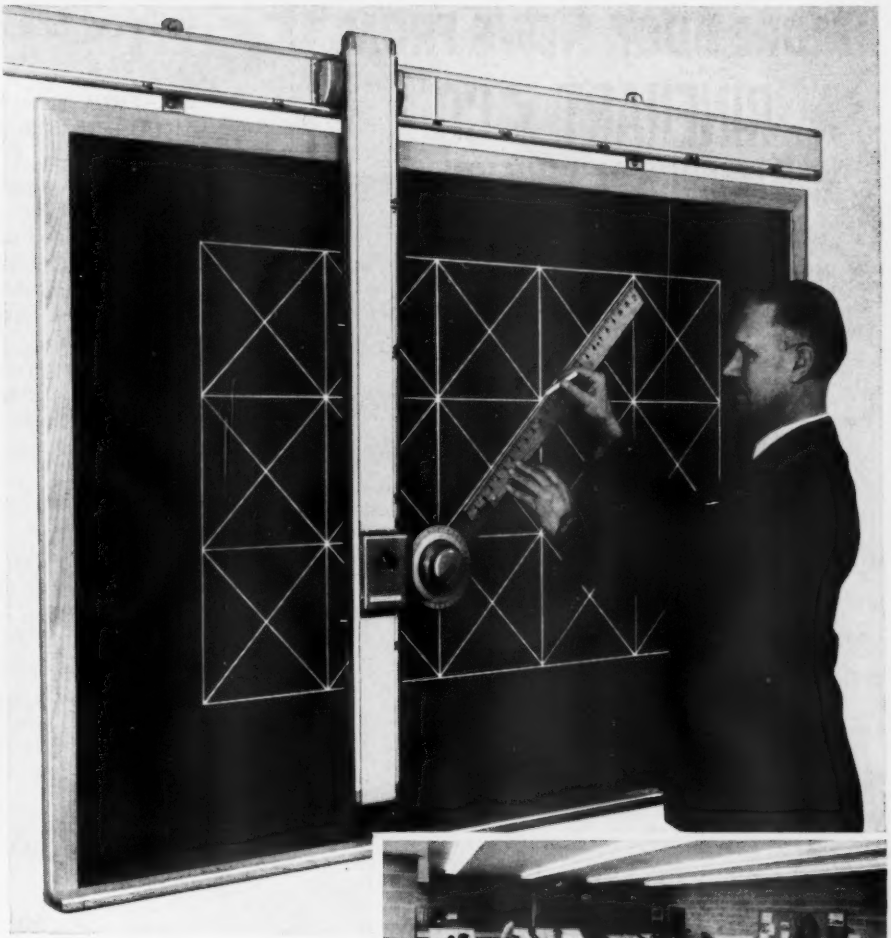

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from the Public Information Committee

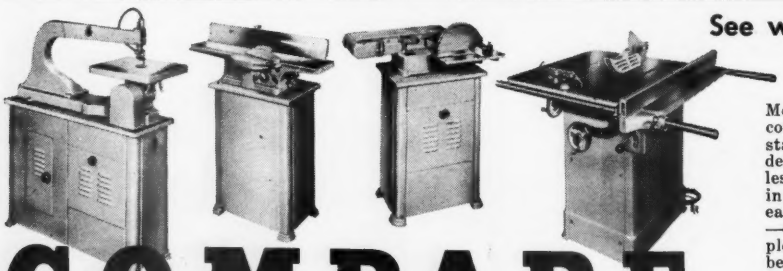
SUPPORT FROM New Sources. Writing in the NEA JOURNAL for October 1959, Margaret Mead, anthropologist, says:

"In thinking about an effective educational system, we should recognize that the adolescent's need and right to work is as great as (perhaps greater than) his immediate need and right to study. And we must recognize that the adult's need and right to study more is as great as (perhaps greater than) his need and right to hold the same job until he is 65."

When high school students polled by *Scholastic Magazine* were asked to pick *one* subject most important in their future careers, 23 percent picked occupational courses.

The revised *Handbook on Adult Education*, the standard reference book in the field, will include for the first time since its appearance in the 'thirties a chapter on adult occupational education.

MEMBERS of AVA Public Information Committee Meet with State Groups. Dr. E. D. Goldman, Assistant Superintendent of Schools at San Francisco and President of the National Association of Public School Adult Educators, represented the AVA Committee on Public Information at the Nevada Vocational Teachers Association on August 25. Dr. H. M. Hamlin, Committee Chairman, spoke for the committee on October 22 before the section on vocational and practical arts education of the Indiana State Teachers Association.



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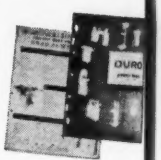

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Stimulating originality is a must in industrial education training and the O'Neil-Irwin Mfg. Co. recognizes this by making projects available to you. These materials present a new approach to the encouragement of individuality in project design.

Students who build projects will gain an understanding of practical design criteria and techniques. With the aid of the Di-Acro Precision Machines they will learn about the materials and processes of industry.

It is of continuous interest on the part of the O'Neil-Irwin Mfg. Co. to help industrial education teachers make their instruction timely. The Di-Acro Educational Service Program is keeping up-to-date. New developments and techniques in the metal working industry are surveyed by our professional advisory council and new projects and ideas are constantly being developed.

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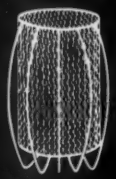

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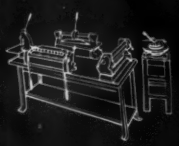

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PROFESSIONAL ADVISORY COUNCIL

Dr. Robert Swanson, Professor of Industrial Education at Stout State College, Menomonie, Wisconsin and

Dr. Donald G. Lux, Associate Professor of Industrial Arts Education at the University of Illinois, Urbana, Illinois are members of Di-Acro's Educational Service Council.

Both have planned many projects and procedures for classes and are consultants in industrial education problems and techniques. They will answer any questions and problems you may have and give you ideas to help you develop your industrial education program.

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Latest Word from Washington

THIS PRE-CONVENTION ISSUE OF THE JOURNAL contains a brief resume of programs to be presented at the 53rd Annual Vocational Convention - Chicago - December 7-11. In previous years, the JOURNAL has published annual convention programs in full. At the last meeting of the Executive Committee, it was decided that only a resume of convention programs would be carried in pre-convention issues of the JOURNAL. This allows more space for other features and news.

A complete roster (all who had contracted for space when we went to press) of companies and organizations that will have exhibits at the 1959 Convention is a feature of this issue. Please check carefully the firms and groups that are supporting your AVA Convention with exhibits—and if you attend the convention be sure to visit each and thank the exhibitors in person. It now appears that at the forthcoming meeting more exhibits will be on display than at any previous annual convention. An opportunity to study the exhibits alone should prove of sufficient professional value to justify the attendance of vocational and industrial arts personnel at the 53rd Annual Vocational Meeting.

Outstanding general, divisional and sectional programs have been arranged. Program chairmen for the several AVA divisions deserve much commendation for the outstanding jobs they have done in arranging for interesting and worthwhile programs.

Dr. James B. Conant, the principal speaker for the first general session, is indeed our nation's "educator of the hour." His report on THE AMERICAN HIGH SCHOOL TODAY (in book form - price $1.00 - McGraw-Hill Book Co., 330 West 42nd St., New York City) is one of the finest presentations of the secondary school program in the U. S. that has yet been published. Among other things, it contains information and recommendations that should encourage the expansion and improvement of vocational and practical arts education in the public schools of our nation. We are sure he will bring a message that will long be remembered to our group. For those who will not be able to attend, we hope to carry his address in either the January or February 1960 issue of the JOURNAL.

Others who will appear on general, divisional and sectional programs will present information that should be helpful to those in attendance in charting vocational and practical arts education programs for the future.

A NATIONAL CONFERENCE ON RESEARCH for vocational and practical arts educators, sponsored by AVA, was held in Washington on October 28, 29 and 30. Vocational and practical arts educators from more than 30 states were in attendance.

AVA President H. H. London and Gilbert G. Weaver, Chairman of the AVA Research and Publications Committee, presided at meetings of the Conference.

Participants included Lawrence G. Derthick, Commissioner, Roy M. Hall, Assistant Commissioner for Research, James H. Pearson, Assistant Commissioner for Vocational Education, and J. Wm. Asher, Research Coordinator (all from the U. S. Office of Education) and Rupert N. Evans, Coordinator of Research in the College of Education at the University of Illinois.

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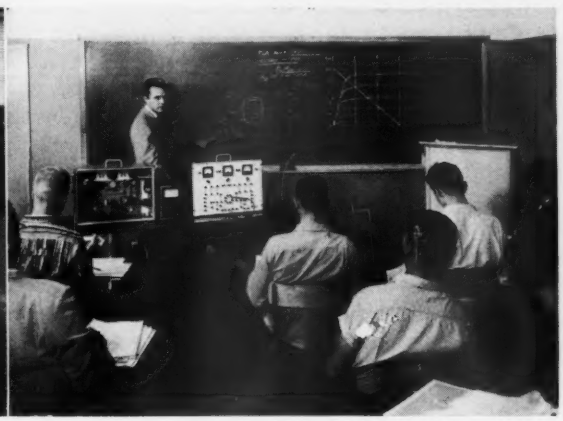

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U. S. Office of Education officials very graciously cooperated with AVA representatives in planning and conducting the Conference. Several Office of Education officials served as consultants to discussion group. Subjects discussed during the National Conference included The Cooperative Research Project, Need for Research in Vocational Education, and Designing Research in Education.

It is hoped that the Conference will result in an upsurge of research in vocational and practical arts education. It is also hoped that many new research projects will receive federal grants from funds being made available by Congress under provisions of the Cooperative Research Act - P. L. 531.

We have been informed that this was the first national conference on research that has been sponsored by an educational group since the enactment of P. L. 531. Many letters commending AVA for planning and sponsoring the three day conference on research have been received in the Washington office. In time, we hope an appropriate report of this National Conference will be developed and made available to AVA members.

DEVELOPING EDUCATIONAL SPECIFICATIONS FOR VOCATIONAL AND PRACTICAL ARTS FACILITIES, a bulletin that has been in preparation for several years as a joint project of the American Vocational Association and the American Instititute of Architects, is now on press. We hope that this bulletin will be available on or prior to December 1. It is the belief of AVA and AIA leaders that it will be of great help to architects and educators in planning vocational and practical arts facilities. Many new vocational buildings are being erected and many others are being renovated throughout the nation. This publication should prove of great benefit to those who are confronted with the problem of either building new facilities or altering old ones.

W. K. Dunton, Warren, Ohio served as Chairman of the Joint AVA-AIA Committee that was responsible for preparing the manuscript for the bulletin. Mr. Dunton and other members of the Joint Committee are to be commended for their efforts in making the contents of this bulletin available to those who are responsible for planning and developing vocational and practical arts facilities. Gilbert G. Weaver, Chairman of the AVA Research and Publications Committee, also played an important role in this project.

THE INDUSTRIAL ARTS FEATURE in this issue of the JOURNAL was prepared under the direction of the Industrial Arts Cabinet. It explains the role of industrial arts education in our public school program. We hope all members of the AVA will read this article.

We hope to see you in Chicago at the 53rd Annual Vocational Convention!

M. D. Mobley, Editor-in-Chief
and AVA Executive Secretary

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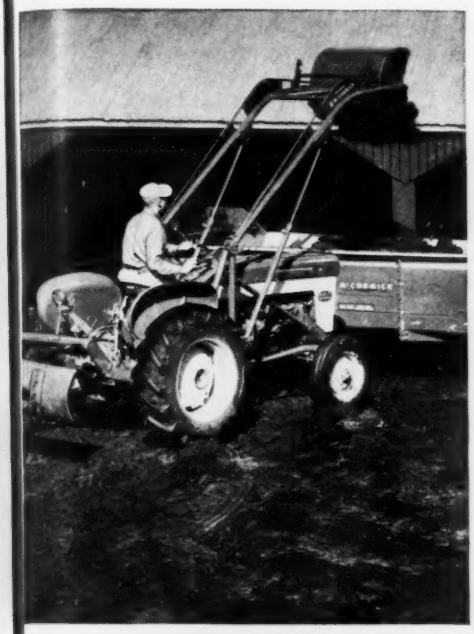
big lift!



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"Live" hydraulic power keeps raising loader fork as you clutch or shift to shorten the loading cycle. This high-volume hydraulic power gives McCormick® loaders tremendous break-away lift . . . helps you load big spreaders minutes faster. You power-steer your way in and out of tight spots and across deep ruts with one-handed ease. And faster tractor speeds and bigger-capacity McCormick spreaders help you spread tons more manure in a shorter day!

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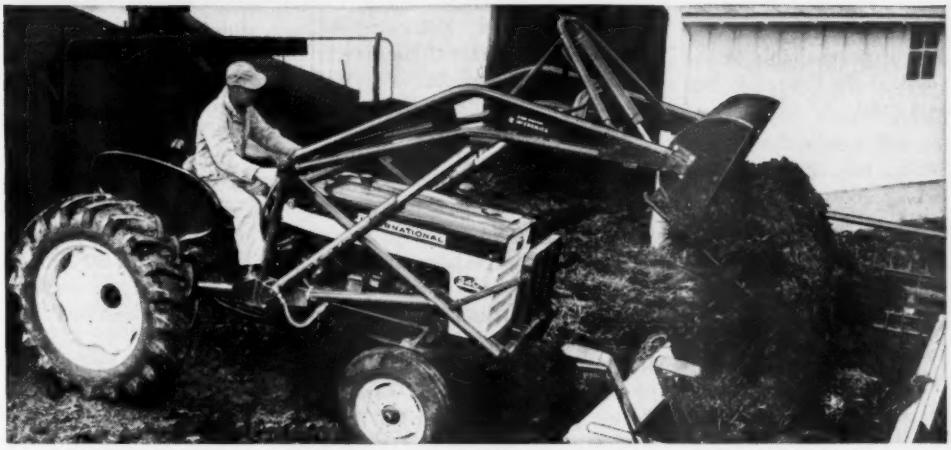

Power-load a 95-bushel spreader in a hurry with this International 340 Utility tractor and a McCormick No. 34 loader. Even in cramped and muddy lots, IH power steering, 2-way control of bucket and boom, and optional Fast Reverser cut loading time way down to help you move tons more manure daily.

Power-away your loading and hauling jobs fast with IH tractors and McCormick equipment to gain extra field time worth hundreds of dollars. See your IH dealer for more facts, and a good deal!

Haul more loads in a day with faster transport speeds. Torque Amplifier drive gives Farmall tractors two road speeds. You can start a heavy load like this 95-bushel McCormick No. 31 spreader in 5th-TA, and when the load is rolling, *instantly* step up to 16½ mph without shifting gears.

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International Harvester Products *pay for themselves in use*—Farm Tractors and Equipment . . . Twine . . . Industrial Tractors and Equipment . . . Motor Trucks . . . Construction Equipment—General Office, Chicago 1, Illinois

Main speakers at general convention affairs include, l. to r.: James B. Conant, James P. Mitchell, and Willard E. Goslin

See You in Chicago!

General, divisional and special program plans for the 1959 AVA Convention in Chicago, Dec. 7-11, are now complete.

Convention Chairman Dr. Hobart H. Sommers has announced that details of additional arrangements for the ladies, school visits and other Chicago specials will be available at the registration desk at the Conrad Hilton —headquarters hotel.

Registration will open at the Conrad Hilton on Friday, Dec. 4 at noon. All persons showing credentials of AVA membership will pay a $2 registration fee. Persons without membership credentials will be required to purchase a direct membership of $6 in addition to the $2 registration fee. Admittance to all divisional meetings will be by registration badge only.

Commercial displays will open on Tuesday, Dec. 8 at 9 AM in the Exhibition Hall of the Conrad Hilton. They will remain open daily, closing on Friday at 1 PM.

Resolutions to be proposed for adoption at the 1959 House of Delegates meeting, Thursday, Dec. 10, at 8 PM, must be submitted to a member of the Resolutions Committee no later than Tuesday, Dec. 8, 6 PM. Members are: T. L. Faulkner, Montgomery, Ala.; Warren H. Hutchens, Saint Cloud, Minn.; Ted Best, Stillwater, Okla; Neil Wodder, Lincoln, Neb.; Kermit A. Seefeld, Santa Barbara, Calif.; Joseph T. Nerden, Hartford, Conn.; and Dorothy Lawson, Albany, N. Y.

Plans for general sessions include major addresses by **Dr. James B. Conant,** A Study of the American High School; and **Willard Goslin,** Professor of Educational Administration, George Peabody College, Nashville, Tenn.

James P. Mitchell, U. S. Secretary of Labor, will speak at the banquet, Dec. 9, 6:30 PM, which is sponsored by the Illinois Vocational Association.

Meetings of the **National Association of State Directors of Vocational Education** begin at 1:30 Dec. 5 with President O. I. Paulson in charge. Persons who will speak at some of the State Directors sessions include Benjamin C. Willis, General Superintendent of Schools, Chicago; James H. Pearson, U. S. Assistant Commissioner of Education for Vocational Education; and Dr. M. D. Mobley, AVA Executive Secretary.

Vocational education in the new states will be presented by Albert J. Feirer, Hawaii; and Howard Matthews, Alaska. Wesley P. Smith will serve as discussion leader for an appraisal of state programs in operation.

Officers of Affiliated State Associations will have two meetings: Sunday, Dec. 6 at 8 PM and Monday, Dec. 7 at 2 PM; as well as a breakfast on Thursday at 7:30 AM. In charge will be President Alfred A. Himelick, Director of Vocational Education, Kokomo, Ind.

International Education meetings are slated for Thursday at 9:30 AM and again at 2 PM that day. Chairmen are Edward Berman, Chief, Latin American Education Division, International Cooperation Administration; and Franklin J. Keller, former Principal, Metropolitan Vocational High School,

Hobart H. Sommers Benjamin Willis J. E. Hill George H. Wilkins Lowell A. Burkett Luther Hardin Harry E. Masters

H. H. London

M. D. Mobley

Chas. W. Sylvester

F. J. Konecny

William R. Mason

Mrs. Rosa Loving

Carl Humphrey

E. M. Claude

Cecil Stanley

The **National Association of Industrial Teacher Educators** begin convention proceedings on Sunday, Dec. 6, 12 noon, with an Executive Committee Meeting. Kermit A. Seefeld, Chairman, Department of Industrial Arts, University of California, Santa Barbara, is President. NAITE meetings continue through Tuesday morning.

American Technical Education Association sessions also begin on Sunday with an officers and governing board meeting at 3 PM. Burr D. Coe, Director, Middlesex County Vocational and Technical High Schools, New Brunswick, N. J., and ATEA President will be in charge.

At a joint luncheon meeting with the National Association of State Supervisors of Trade and Industrial Education on Monday, ATEA members will hear Abner G. Hathaway, Supervisor of Technical Writing, United Electronics Laboratories, Louisville, Ky., discuss the *Task Force on Instrumentation Technicians.*

Academic teachers will meet with Harry Lewis as chairman.

Agricultural education meetings will open with executive committee sessions of the National Vocational Agricultural Teachers' Association Wednesday morning, Dec. 2, at 8:30. Luther Hardin, President, and Teacher of Vocational Agriculture, Searcy, Arkansas, will be Chairman. Executive Committee meetings for NVATA will continue through Friday, Dec. 4.

The first general session of NVATA on Saturday at 9 AM will be followed by a special program, starting at 10:45 that will present Howard Miller, Ohio State University and Hamilton Hicks, Education Director, d-Con Co., New York City, as speakers.

Regional meetings are slated for Saturday afternoon from 1-5 PM and a dinner meeting for state presidents will be held that evening at 6:30.

NVATA will have a second general session as well as program of work meetings on Sunday afternoon.

A reception for combined agricultural education groups and wives, sponsored by the Illinois Association of Vocational Agriculture Teachers will be held Sunday, 5 to 6:30 PM.

Agricultural education divisional committee meetings open Monday morning at 8 AM.

R. F. Espenchied, Vocational Agricultural Service, University of Illinois, Luther Hardin, President, NVATA, Howard A. Dawson, Director of Rural Service, NEA; T. J. Horne, Head, Agricultural Education, Virginia Polytechnic Institute; Raymond M. Clark, Associate Professor of Agricultural Education, Michigan State University; Henry Kennedy, Instructor, Agricultural Education, Michigan State University; and Herbert R. Damisch, Illinois State Chief, Agricultural Education, will offer reports at consecutive meetings of combined agricultural education groups Monday from 1 to 4 PM.

Carl M. Humphrey, AVA Vice President for Agricultural Education will chair an Executive Council Meeting that begins at 4 PM Monday afternoon.

A business meeting of the combined agricultural education groups Tuesday at 8 AM will be followed by a general session at 10 AM that will feature a panel discussion on gearing vocational agriculture to changing times.

The annual International Harvester Luncheon, with W. T. Schnathorst, Supervisor of Education Services, in charge, is scheduled for Tuesday noon. Annual breakfast meetings for state supervisors (H. M. McDonald, Baltimore, Md., Chairman); Teacher Trainers (R. W. Montgomery, Auburn, Ala., Chairman); and vocational agriculture teachers (George Buchanan, vocational agriculture teacher, Frankfort, Ky., Chairman) have been arranged for Wednesday morning, Dec. 9. The annual A & P luncheon will also be held on that day.

At combined agricultural education group sessions Wednesday afternoon AVA Executive Secretary Dr. M. D. Mobley will be a featured speaker.

Thursday morning, both G. E. Henderson, Coordinator, Southern Association of Agricultural Engineering and Vocational Agriculture, Athens, Ga., and Henry S. Brunner, Specialist for the Agricultural Sciences, U. S. Office of Education, will speak.

Final Executive Committee meetings for NVATA will convene on Thursday from 10 AM until 5 PM.

The *Changing Status of Business Education* is the overall theme for deliberations of **business education** members of AVA. At the first meeting, Monday, Dec. 7, 9:30 AM, William Selden, Consultant, Business Education, Harrisburg, Pa., will be in charge.

The National Association of Supervisors of Business Education will convene Monday afternoon with President H. D. Shotwell of Topeka, Kansas, as Chairman.

A tour of the Chicago's new Dunbar Vocational High School has been arranged for this division on Tuesday morning.

Tuesday afternoon a panel discussion on the changing status of the business education curriculum will be featured. On Wednesday afternoon the changing status of teacher qualifications will be studied and the changing status of performance standards is the topic for Thursday morning.

Thursday afternoon has been set aside for consideration of new approaches to learning.

Herbert Damisch Enos C. Perry Robert Kozelka Mary Bell Vaughan Walter A. Klehm Byrl Shoemaker Kermit A. Seefeld

Business education delegates are invited to attend meetings of the Illinois Business Education Association Friday morning at 8:30 and 10.

Distributive educators will concentrate on facts for the future at Chicago meetings that begin on Sunday with a session of the Distributive Education Policy and Planning Committee. Presiding at this time will be Warren G. Meyer, Chairman and Teacher Trainer, University of Minnesota.

Edwin L. Nelson, President of the Distributive Education Clubs of America, Inc., with chair a joint meeting with State Supervisors of Distributive Education Monday morning at 8. Also scheduled for Monday morning is a general session for DE State Supervisors which will be continued on Monday afternoon when a panel discussion on the evolving philosophy of distributive education will be presented.

The National Association of Distributive Education Teachers will meet Monday afternoon to consider problems of their organization. They will also hear committee reports.

A divisional business meeting scheduled for Tuesday morning will feature committee reports and new business.

Improving Content in Distributive Education is the theme for Tuesday afternoon. Reports of Research on DE content from the U. S. Office of Education and from the Central Region will be heard at this time.

M. J. DeBenning, Oklahoma State Supervisor, will preside Wednesday morning when facts about the cooperative part-time program as viewed by business executives will be the theme. *The Education of Adults for Distributive Occupations* is the theme for Wednesday afternoon when R. C. Van Wagenen, Business Education Chief in California, will preside.

A dutch treat breakfast has been scheduled for members of NADET Thursday morning. A divisional luncheon that has been arranged by the Variety Stores Association and the Illinois Retail Merchants Association will be held Thursday at noon.

NADET will meet again Thursday afternoon with President Nelle G. Flynn, Management Training Specialist, Atlanta, Ga., in charge. Co-Chairman will be George Frack, Vice President and District Supervisor, DE, Findlay, O.

The content and method of distributive education will be studied Thursday afternoon. A reception will follow at 4 PM.

All distributive educators are invited to attend the joint AVA-IVA distributive education meeting Friday morning at 9. Presiding will be Herbert Ross, Teacher-Coordinator, DE, Alton Senior High School, Alton, Ill.

Rose Wanek, Lincoln, Neb., will chair the first **home economics education** session, which will be for members of this division's policy and planning council, Monday, Dec. 7 from 9:30 AM until 4:30 PM.

The National Association of Vocational Homemaking Teachers will meet Tuesday morning, with *Challenges for the Home Economics Teacher* as a theme. Chairman will be Elizabeth LoMonaco, Home Economics Department Chairman, North Chicago High School.

After hearing a program by the North Chicago Community High School Choir Tuesday afternoon, homemaking teachers will discuss management decision-making in home economics classes. Marjorie Hill, Doris Ray, M. Ruth Krause and May W. Paula will form a panel for this purpose.

The National Association of Teacher Educators of Home Economics is slated to meet Tuesday morning, with *A Look Ahead in Teacher Preparation* as the theme. Tuesday afternoon this group will consider issues in home economics education and what may be done about them.

The National Association of State Supervisors of Home Economics will also meet Tuesday afternoon to hear an address by Dr. Hobart H. Sommers, Assistant Superintendent of Schools in Chicago. A home economics divisional meeting will convene Wednesday morning and afternoon. The morning chairman is Mary Bell Vaughn, Assistant State Director of Home Economics Education in Kentucky. In the afternoon, Muriel G. McFarland, Professor of Home Economics Education at Purdue University will preside.

McCall's Pattern Company will host a home economics breakfast Thursday morning. The program that follows, with Ruth Schooler, Supervisor of Homemaking Education at Gary, Ind. presiding, will be devoted to a study of new directions for home economics education.

The Illinois Vocational Homemaking Teachers Association will meet also on Thursday morning and again on Friday. All home economics educators are invited to attend these sessions.

Events for **industrial arts** educators begin on Sunday at 3 PM when the Industrial Arts Policy and Planning Committee will meet. Chairman is G. Wesley Ketcham, Consultant in Industrial Arts, Hartford, Conn.

The National Conference of State and Local Supervisors of Industrial Arts is scheduled for Monday from 9 AM until 4 PM. General Chairman will be Roy V. Orendorf, Associate Education Supervisor, Bureau of Industrial Arts Education, Albany, N. Y. The program will include workshops for state supervisors, local supervisors, a general meeting and a business meeting.

Robert M. Worthington, Professor and Chairman, Industrial Arts Department, Trenton State College, Trenton, N. J., will preside at a divisional meeting that will be held Tuesday afternoon. Six discussion groups will consider a number of important topics that include planning, problem solving, creative expression and experimentation in industrial arts; the integration of science and mathematics in

R. E. Bass

A. A. Himelick

James Wall

Harry Lewis

Edward Berman

W. P. Klingensmith

industrial arts; the question of what emphasis plastics, textiles and ceramics should have in the program; the role of guidance; an evaluation of the unique contributions of industrial arts; and industrial arts for girls and women.

W. P. Klingensmith who is president of the Illinois Vocational Association and Supervisor of Industrial Arts in Chicago will preside at a divisional meeting on Wednesday morning. Main speaker will be AVA President Dr. H. H. London.

A business meeting is also scheduled for Wednesday morning. William R. Mason, AVA Vice President for Industrial Arts will preside.

Chairing a divisional meeting Wednesday afternoon will be John A. Jarvis, Dean of the School of Industrial Education, Stout State College, Menomonie, Wis. Dewey Barich, President of the Detroit Institute of Technology, will be the featured speaker.

William Kohlson, Manager of General Electric's Pitney Glass Plant, Nela Park, Cleveland will speak on *Adventures with Glass, Matter, and Men* at a divisional meeting Thursday morning. Presiding will be Verne L. Pickens, Chairman, Division of Practical Arts and Vocational Education, Kansas City, Mo.

Demonstrations have been scheduled for Thursday afternoon. Featured will be electronics, liquid plastics, ceramics, metal, graphic arts, plastics, textiles, and wood finishing.

Tom G. Bell, President, will open the first meeting of the *National Council of Local Administrators of Vocational Education and Practical Arts* Sunday evening, Dec. 6, at 7 PM. A national look at vocational education from the local directors desk is the theme.

NCLA's annual luncheon and business meeting is scheduled for Tuesday, Dec. 8.

Meetings of the **Trade and Industrial Education** Division's Policy and Planning Committee begin Sunday, Dec. 6 at 10 AM.

The National Association of State Supervisors of Trade and Industrial Education will meet with the American Technical Education Association Sunday evening at 8 PM.

Trade and Industrial Education divisional meetings will open Tuesday morning, Dec. 8 with a general session and four programs built around the balanced program of preparatory training for high school youth. Chairmen will include John P. Walsh, Director, Trade and Industrial Education Branch, U. S. Office of Education; Merle W. Bodine, Kansas State Supervisor of Trade and Industrial Education; C. E. Stiner, Director, Trade and Industrial Education Service, Kent State University, Kent, O.; and Grace A. Martin, Principal, Jane Addams Vocational High School, Cleveland.

These meetings will include sessions of the State Supervisors of Trade and Industrial Education, the National Association of Industrial Teacher Educators, and Women's Section, Trade and Industrial Division.

The State Supervisors, the American Technical Education Association and the Women's Section also have meetings set for Tuesday afternoon.

Six programs developed around a balanced program of trade extension instruction have been announced for Wednesday morning. One will be sponsored by the Joint Committee of AVA and the Bureau of Apprenticeship and Training.

Eight sectional meetings centered around the theme *What's New* have been arranged for Thursday morning, Dec. 10. Chairmen will be Mary S. Resh, Program Specialist, Trade and Industrial Education Branch, USOE —*Housing and Feeding People;* Howard K. Hogan, Consultant in Employee-Employer Relations, Trade and Industrial Education Branch, USOE—*Training in Instrumentation and Automatic Control;* John S. Oklepek, Instructor, Vocational Machine Shop and Supervisor of Evening Trade Extension, Proviso East High School, Maywood, Ill.—*New Techniques in Machine Control;* Andrew D. Althouse and E. C. Hendricks—*Automotive Industry Vocational Education Conference;* Raymond Schultz, Instructor, Vocational Technical Institute, Southern Illinois University, Carbondale—*What's New in Radio-Television and Electronics;* C. H. Turnquist, Assistant Principal, Cass Apprentice School, Detroit; Paul Liehr, Vocational Machine Drafting Instructor, Thornton Township High School, Harvey, Ill.; and Samuel M. Burt and Howard Massman —*What's New in Graphic Arts Education.*

A joint meeting of the trade and industrial education members of AVA and the Illinois Vocational Association, Thursday afternoon, Dec. 10 will have F. J. Konecny, AVA Vice President for T & I as Chairman.

The Women's Section of the Trade and Industrial Education Division of AVA has scheduled six meetings for Convention week. The program for this group's annual luncheon and business meeting at the Chicago Yacht Club will feature an address by Peter M. Krager, Chairman, Physical Sciences Department, Wright Junior College, Ill. Catherine Grant, President, will be in charge.

* * *

All convention delegates will be able to wind up their week of concentrated deliberations with an afternoon of fun and relaxation Friday when The Ship will take over with entertainment and the distribution of prizes.

Bringing The Ship to Port and Extending Greetings will be Captain Harry E. Masters who is Educational Director, the L. S. Starrett Company, Athol, Mass.

AVA Recognition Awards will be presented at this time by Lowell A. Burkett, AVA Assistant Executive Secretary and convention coordinator.

A statement of

Industrial Arts

In Education

INDUSTRIAL ARTS *is the study of industrial tools, materials, processes, products and occupations pursued for general education purposes in shops, laboratories, and drafting rooms.*

The unique contributions of industrial arts are *to help learners develop a degree of skill as they solve problems with the tools, materials, and processes of industry; to provide exploratory experiences in a variety of industrial activities; and to develop the skill and knowledge necessary to produce and use working drawings.*

DESCRIPTION. — In industrial arts students *receive orientation in production, consumption, and recreation* through *actual experiences in planning, producing, testing, servicing and evaluating* types of consumer and industrial goods. It is organized to *facilitate meaningful and stimulating activity* in shops, laboratories, and drafting rooms. Through these experiences *young people learn about industrial products.* They learn *how* such *goods are made.* They learn how to *use and maintain these products* intelligently. They develop general *skill and resourcefulness* in working *with technical and mechanical* things. They *learn facts, principles,* and *procedures about tools, materials, processes, mechanics, and design.* They learn *about woods, metals, plastics, ceramics, textiles, paper and other* industrial materials. They learn about *electricity, motors, engines, structures* and other *items of concern* to people *at home,* on *the farm, in industry and in recreation.* Above all, *they experience critical thinking in solving technical problems,* thereby developing *an understanding* of the complex *integration of industry* into modern society. The program embraces *such major activities as woodworking, metalworking, graphic arts, power mechanics, electricity and electronics, leatherworking, plastics, ceramics,* and general *drafting. Planning* is included *in all* of these. These major activities are not regarded as separate areas but as integrated experiences and segments of the total program. This *integral and essential part of American education* is easily *adapted* to the *needs* and *capacities* of the *learners as it makes* an *optimum contribution to* the *development of good citizens.* Industrial arts provides, also, an educational climate for *applied scientific knowledge, creative expression, and integration of learning.*

PURPOSE. — Industrial arts should foster the development of a strong foundation in technical skills, consumer knowledges, and attitudes regarding matters needed for happy and effective living. Public secondary education should provide every boy and girl the opportunity to work with the tools and materials of industry, thereby acquiring an understanding of our technological developments. This is the purpose of Industrial Arts.

WHERE FOUND.—Industrial Arts is often introduced in the American schools in the kindergarten where children work with paper, clay, and other easy-to-form materials. These activities become more involved with the maturity of the children. Organized classes in special rooms are well established on the junior high school level. Depth in such activities as machine shop, industrial electricity, power mechanics, and drafting is provided in high schools. Adult programs built around industrial avocations and "do-it-yourself" home construction and repair are popular.

BASIC AREAS.—In the junior high school, industrial arts is concerned with surveying industrial materials, processes, organizations, and problems in each of the categories described. In the senior high school, emphasis is placed on the integration of all industrial processes, the development of technical skill and understanding, and the application of problem solving techniques in one or more of these basic areas.

Drafting.—Drafting is involved in all areas of industrial arts. It is the medium through which ideas are transferred to materials and is, therefore, basic to the study of all industrial arts. Within this area students learn to plan, sketch, design, and prepare working plans for the projects they construct. As they do this, they learn many of the problems related to the multiple activities of industry. Included also in this area are related activities such as planning operational procedures, use

Editor's Note: This material, which will soon be published as a brochure, has been prepared by members of the Industrial Arts Policy and Planning Committee of the American Vocational Association. It is a revision of an earlier statement that was published in 1956 and disseminated in huge quantities through the years.—G. HAROLD SILVIUS, Professor and Head, Industrial Education, Wayne State U.

of reference materials, and cost estimating. Home planning and design, site development, and the problems of home construction are important parts of the drafting program. Drafting is a form of communication similar to reading and writing and performs the same function in industrial technology that reading and writing provides for education in general.

Electricity and Electronics. — This area of work can be divided into electricity and electronics. Fundamental instruction in electricity consists of experience with apparatus, tools, and materials so students may make applications with sources of power, circuitry, and switch gear. Emphasis is placed on fundamental theory, circuits, equipment devices, operation of component parts, installation and maintenance of equipment, use and control of power, computation and testing. Projects are of four types: take-home, assembly and disassembly, instructional equipment, and experimental devices. Advanced work in electronics is concerned with the characteristics, properties, and practical application of electrons in the vacuum or gas filled tubes and semi-conductors. The application of electronics principles can be applied to communications (microwave transmission, radar, radio, sonar, telemetering and television) and industrial controls (computers, motor controls and servo-mechanisms).

Graphic Arts.—The area of graphic arts provides experiences in using tools, materials, and processes to solve problems related to printing and publishing. Units of instruction cover both letter press work and lithography. The activities include bookbinding, linoleum block, silk screen, printing design, typesetting, cutting stencils, typography, and duplicating.

Industrial Crafts.—There are additional activities in the industrial arts that reflect important manufacturing areas and crafts. Plastics, ceramics, and textiles are examples. Since these activities are representative of our major industries and crafts, they are often included in industrial arts as they are offered in multiple activity shops. Then too, there are the avocational interests that have become increasingly important as our technology has provided people with more leisure time. These could include such activities as jewelry making, lapidary, and leatherworking.

Metalworking.—Metals are the backbone of modern industry. They are present in countless products and are used extensively in machines and equipment for manufacturing products. About one in ten of our working force is either directly or indirectly working with metals. The expanding use of all types of metals coupled with research in the development of cold and heat resistant materials makes this one of the more important areas of industrial arts. Study in metalworking covers a wide range of activities including sheet metal forming, machining, welding, casting, forging, enameling, and spinning. Metalworking is enriched as students become interested in design, metallurgy, production techniques, and instruments for exact measurement.

Power Mechanics.—Power mechanics is the study of power, motors, engines, and vehicles. It is designed to include the many different phases of power development and mechanical operations of power equipment. Courses are organized around sources of power and the application of appliances, structures, vehicles, devices, and mechanisms. Study in power mechanics provides excellent opportunities for the development of problem solving abilities while working with tools, materials, and processes related to power development and its importance to society.

Woodworking.—Wood is one of the most common materials known to man. It serves too, as the core for the development of functional industrial projects, since wooden parts are often required to facilitate construction. Recent developments in woodworking and related technology make it a rich content area for studying modern industry. Much of the adult "do-it-yourself" activities are identified with the fabrication and shaping of projects with parts built from wood. This area in American schools covers such typical activities as hand woodworking, machine woodworking, furniture construction, model building, boat building, and home construction. Courses emphasize creative design, forming and construction processes, and an understanding of wood and related technology.

LEVELS—Elementary—Grades 1-6. —Industrial arts in the elementary grades consists of construction activities, which are a part of the common learnings of elementary school children. It contributes to the child's personal development and helps him understand his environment. Such activity should be closely correlated with the basic units for elementary education so that the results will be an integrated program of education. Usually the activities, with hand tools and common materials, take place in the classroom under the direction of the elementary teacher. Some schools provide a special room for work on individual or group projects which cannot be completed in the classroom. Specially trained consultants or resource teachers are employed to work with both the teachers and the pupils.

Junior High—Grades 7-9. — Well-organized shop and laboratory experiences provide junior high school youth with an understanding of their interest, abilities, limitations, and opportunities. It also helps them make satisfactory adjustments as consumers and producers of industrial products and services. The program provides practical experiences in the use of many of the tools, materials, processes, and products of manufacturing as well as those of the crafts. Through such experiences students come to understand their avocational and vocational interests and abilities. When pupils work in a broad, well developed industrial arts program designed to meet their needs, their specialized interests become more discernible for concentration at the senior high school level.

The junior high school program should include opportunities for planning and working in the major activities of drafting, woodworking, metalworking, power mechanics, electricity, graphic arts, and the industrial crafts. Industrial arts at this level is essential to the basic education and guidance of all boys and girls.

Senior High—Grades 10-12. — In the senior high school industrial arts is an important part of the school program. In our modern industrial society, every student needs to develop an understanding of the functions, technology, and occupational opportunities of industry. The industrial arts

The guidance function of industrial arts cannot be overemphasized

programs provide this opportunity to study about industry, materials, and fabrication procedures; methods of communication through drawing and graphic arts; and the industrial and consumer use of finished products, such as electrical devices and how power is developed. This body of knowledge is unique to industrial arts and should be included in the education of all youth.

The guidance function of industrial arts cannot be over emphasized, for in a well conducted course, the high school student is able to develop an understanding of the integrated roles of the scientist, designer, engineer, technician, craftsman, laborer, and manager coupled with the related phases of industry. Through the understandings gained from the industrial arts program, plus adequate testing and counseling, the high school student can be guided into an industrial occupation that suits his ability and interest.

Finally, the senior high school program aids the fulfillment of general education objectives by helping the student develop an understanding of the social impact of industry on modern society while he develops skills for possible avocational activities.

College Level.—The industrial arts offered in colleges is usually taught to prepare industrial arts teachers, persons for technical occupations, and to contribute to general education.

Stamford High School boys, Stamford, Connecticut, work in the electricity area of their industrial arts shop

The Editorial Committee

IAPPC

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Preparation of Industrial Arts Teachers.—Programs to prepare teachers of industrial arts include three types of work, the basic academic courses required of college students, technical and shop courses in the various areas, and work in professional education. Graduates receive a bachelor's degree. Graduate study beyond the first degree leading to the master's and doctor's degrees usually consists of the more professional courses, with emphasis on research, and less emphasis on shop and technical courses.

Preparation for Non-teaching Occupations.—Industrial arts courses on the college level may be taken by persons perparing for vocations in fields other than teaching. Many jobs require a general technical background. Graduates of two or four-year programs obtain employment in business and industry in sales positions, production, and as technicians. This type of program is often similar to that for the preparation of teachers except that courses in personnel management, business administration, labor problems, supervision, are substituted for the block of work in professional education.

Electives for General Education.—Facilities and offerings are provided in many collegiate programs so students may elect courses or work during their leisure in industrial arts. College students derive creative expression from constructing scenery and props for dramatic productions, television, and college activities; wrking in ceramics, jewelry, and woodworking; developing and operating radio broadcasting equipment; and in the construction of archery equipment, furniture, boats, and the like.

Adult Level.—Increased industrialization has brought importance to industrial arts for adults. With more available leisure time, adults need to develop pleasureable and worthwhile hobbies and supplementary income activities. As consumer products become more numerous and complex there is need to teach the wise use and maintenance of these modern conveniences. Adult programs in industrial arts are usually maintained as evening school programs in high schools, colleges, or vocational schools.

ACKNOWLEDGEMENT.—This is a revision of an earlier statement, under a similar title, that was prepared by the industrial arts Policy and Planning Committee of the American Vocational Association in 1956. The original manuscript was coordinated by a subcommittee of the IAPPC consisting of Kenneth Brown, Chris Groneman, James Hammond, John Hurley, Lynne Monroe, Walter R. Williams, and G. Wesley Ketcham, Chairman.

In 1958 the IAPPC again undertook to bring this statement up to date. The editorial committee has attempted in this release, to report what is believed to represent the common denominator for industrial arts in American education. It is recognized that the variations, from community to community and from state to state, in terminology, basic areas, emphases, and physical plants are inevitable, but desirable in the democratic process. The goal was to report what would represent the collective thinking, to the greatest possible degree, of the industrial arts Policy and Planning Committee of the AVA.

THE AMERICAN HOME / and how it contributes to successful living

MOTHERS ARE A STRANGE combination of success and failures, smiles and frowns, praise and blame, aches and pains, hopes and fears, flesh and fancies, wishes and prayers. There is nothing on earth as down to earth as mothers when they are not "up in the air." There is nothing more natural, and nothing quite as supernatural. Mothers are people like the rest of us!

No person in the Old Testament points up these observations more dramatically than Naomi's daughter-in-law, Ruth. When Naomi said to Ruth, "Your sister-in-law has gone back to her people and to her gods; return after your sister-in-law," Ruth replied in unforgettable words: "Entreat me not to leave you or to return from following after you; for where you go I will go, and where you lodge I will lodge; your people shall be my people, and your God my God; where you die, I will die, and there will I be buried."

Ruth had what every woman needs and so few possess: Integrity, Intelligence, Poise, Patience, Loyalty, Tact, Honor, Humor, Perspective, Resourceful Love, and Undying Faith.

No wonder she was the great-grandmother of one of Israel's greatest kings and leaders, David. He who slew Goliath, who wrote the words, "The Lord is my shepherd," who sang, "The heavens declare the glory of God," who sinned as few men have sinned, and served as few have served, who extended the boundaries of his nation and blessed her with prosperity—"a man after God's own heart" was the great-grandson of a woman whose name was Ruth.

Ruth was equipped by maturity for marriage. So few are! The state demands that people reach a certain age, that they take a test to prove that they are not carriers of venereal disease, and that the marriage service be performed by a qualified person. That is all, and it is almost nothing. No test is given to see if the parties are emotionally mature, financially responsible, morally sound, socially compatible, and spiritually sincere.

The forces that destroy homes we never ask about before homes are formed. An applicant for a driver's license must prove he can drive, but an applicant for marriage needs nothing but an intent. A man must be licensed to operate a tavern, but the state does nothing to set up regulations on the minimum requirements for the operations of homes.

Home is where we should keep faith with yesterday and tomorrow

Recent statistics reported to me are startling. These I quote may not be exact, but they are close enough to be used: among teenagers, one marriage out of three ends in divorce, among college graduates, it is one out of 70, among college graduates where the girl holds a B.S. degree in Home Economics, it is one out of 270.

I am startled by the figures concerning the latter group, but I can see the reason why: home ec majors are the best qualified people for the task of home building. In some respects, they are the only ones.

In terms of broad college training they are the best prepared people in the nation. Oh, some who hold AB degrees, who can read Latin and quote copiously from literature, look down their noses on girls who become home ec majors. They hold themselves as superior. But are they? Look at the home ec courses: two years of liberal arts education which contains literature, history, languages, mathematics, and kindred subjects; two years of science, e. g. physics, chemistry, bacteriology, nutrition, and biology; elective courses in music, art, creative writing; two years of practical subjects, e. g. home furnishings, home decorating, preparation and serving of meals, sewing, dress designing, the care and nurture of children, and may I add, the care and nurture of husbands.

When one analyzes the broad culture and practical courses open to girls in modern home economics departments, one can only conclude that these people are among the select few who are being trained for the most important task in the life of our nation, the task of creating happy, integrated, useful homes.

Editor's Note: Presented here are excerpts from a sermon written by Dr. Walter R. Courtenay, Minister of the First Presbyterian Church, Nashville, Tenn. It deals with the menace that confronts the American family as a result of inadequate preparation for and training in homemaking and the contributions of home economics courses in safeguarding and preserving the American home. It was published in full in the May 11, 1959 edition of THE NASHVILLE BANNER.

This fact points the finger of criticism at universities and colleges which prepare girls for everything except this major task. We offer them a catalogue of courses, few of which have any practical value in helping prepare them for marriage and the running of happy homes. We give them the same courses we give men, and in pretty much the same way. But women are not men, thank goodness, and most of them are not going to follow professional careers. What they need for their own sanity, security, and usefulness is a solid base of liberal arts subjects topped off by practical courses such as are included in a home economics major. Most of the girls graduating from our universities and colleges look toward the future as brides-to-be, and we do almost nothing to help them meet and fulfill their major role in the earth and the Kingdom.

Nor are homes taking up the slack. It used to be that mothers in the homes of America prepared their daughters for marriage by teaching them the rudiments of house management, the preparation and serving of meals, sewing, decorating, flower arrangements, and so forth. Too little is being done in this area now. More needs to be done. It is to be regretted that in many instances neither mothers nor universities are helping prepare girls for marriage and the tasks that follow.

RECENTLY I SAT in a farm home watching breakfast being prepared. The fried potatoes looked as a woman looks when she is well coated with cold-cream. If the eggs had been dropped in the yard and then served they would not have been altered in appearance. Here was a girl of 19, the mother of two children, and she was absolutely lost in the kitchen and the nursery. I thanked God she was neither my wife nor my cook. No one could be less prepared for a major task. A friend of mine, rooming in that home, recently commented that it was truly tough when you ate three kinds of beans in the same meal and all of them cold.

Ah, you say, but she was a simple, untrained country girl. True! But would the case be different if I made a study of the graduates of most of our universities this June? Would they really know much more about their futures as wives and mothers? When a man gets around to marrying, he wants an attractive wife, a wife of intelligence and integrity, one who has some concept of culture and propriety. Every man wants to marry a woman with character, and not just character—one who is above all a wife, a mother, a house manager, a safe nutritionist, and a person who is fun to live with.

NOTHING IS MORE appalling about modern American life than the unpreparedness of men and women for marriage, home making, and the care and nurture of children.

I personally feel that I owe a double duty to life: a solemn duty to my ancestors, and a pressing duty to my descendants. To fail either is to fail. Homes are places where we ought to keep faith with those who have preceded us, and those who follow. When homes fail, where do you look for success?

So much has been written and said in a derogatory manner concerning those who peopled America and Great Britain during the last century, called the Victorian Period, that I get red in the neck just thinking about it.

We accuse them of being authoritarian, indifferent to social problems, and ignorant where sex was concerned. Men and women have splashed that era of history over and over until it now looks like certain types of modern art which can only be characterized as the products of bewildered minds.

Two things the so-called Victorian era did: It taught children to respect authority, and it taught them manners. Now that we are all authorities on sex and freedom, what has happened to respect for authority, and what has become of good manners? And what, may I ask, are we to do with the fact that the Victorian Era produced some of the finest men and women who have ever graced the earth?

A recent writer in the British Weekly was contrasting the maligned period of Victoria and our own. In those depraved days children were taught manners.

Now what of today? In Glasgow, Scotland, recently, children on buses became so rowdy and abusive that the drivers refused to work!

We live in a day when our major attention is directed toward solving the gigantic problems of economics and politics on a world-wide scale. Conferences between free nations and the Communist lands grab headlines, and we wonder whether we can win the cold war that now exists and the hot one that may follow after. And while this goes on almost nothing is being done about the only basic defense we have against the atheism and brutality of Soviet lands—the American Home!

WE BOAST of the number of students graduating from colleges and universities, but are they prepared to become part of the great American team majoring in making marriages successful and homes secure? Have we done our job when we have emphasized subjects to be mastered, rather than life to be lived? If girls are not being adequately prepared for their main task on earth, that of wife and mother, whose task is it to prepare them?

Of one thing I am sure: If we do not do something drastic and thorough about preparing our young people for marriage, and our girls for the task of home making, mind making, body making, life making, community making, it will not make too much difference who wins the cold war, for America will already have been lost.

What about the IQ?

By William H. Knight

WITH THE CURRENT healthy concern for the gifted student, the IQ of the individual has come in for increased attention. The intelligence quotient, as an expression of the relationship between the chronological and mental ages, is being used as a means of labelling students with respect to their academic potential.

The classification of individual students into such categories as "gifted," "slow learner," and the like is not without danger to the student himself and to the educational system. Parents and others at times have accepted an IQ score as being an exact measure and a subject either for pride or embarrassment. Vocational teachers have on occasion dispaired of their students who, on the basis of some "intelligence test," were labelled as "academically retarded' or "slow learners."

Just what is the significance of the IQ and what are its limitations?

In determining the intelligence quotient, the performance of the individual's responses to the test items yield a mental age equivalent. The mental age divided by the chronological age and multiplied by 100 provides the I.Q. The equation is as follows:

$$\frac{MA}{CA} \times 100 = IQ$$

Psychologists recognize today's instruments for the measurement of intelligence are less than perfect. Present measurement instruments usually are considered as measuring the scholastic aptitude of a student.[1] It should be pointed out that this is a far cry from the notion that intelligence is an innate quality, and one by which an individual's total abilities may be measured. Even the definition given here is not completely satisfactory. For example, one might predict that a group of youngsters with superior IQs would be successful in school. Such a prediction would not necessarily hold true for any one individual within this group, however. Nor would one be able to say that any or all of the group would be equally successful within specific subject matter areas. The IQ is not

Prof. Knight is a member of the Agricultural Education Staff, Ohio State University.

We need to recognize the inadequacies of the IQ as a single measure of ability

an indicator of aptitude within specific areas. This is especially true in such areas as art, music, mechanical ability, and social leadership.

A CONSIDERATION of the constancy of the IQ is appropriate. IQs do change. There are many reasons for these changes. For example, a child with a poor environment in which he is not exposed to new, challenging, or intellectual experiences *may* when placed in an improved environment show a decided increase in IQ over a period of time. Or, take the child who considers himself a failure in school or in nearly everything he does. Nearly all teachers have at one time or another had these unfortunate individuals. This person will not be motivated to achieve and may find the testing procedure so frustrating that he prematurely gives up trying. And IQs change with age. Before the age of nine, fluctuations may be rather wide, but after nine, barring exceptional conditions, the IQ stabilizes and fluctuations, although occurring, are rather narrow in range.[2]

VARIATIONS OF considerable interest to vocational teachers may occur in using different instruments for measuring intelligence. To understand the implications for us of these variations it is necessary to recognize that there are considerable differences in the nature of these tests. The results with which we are probably most familiar are those of *group* tests given in the school. These tests depend largely on skill and speed in reading. Usually they are validated using the criterion of success in school. On the basis of their construction and usage they are fairly good indicators of success in school work involving reading skill and word comprehension. In vocational subjects where these skills are less important their predictive value is correspondingly less.[3]

Not all intelligence tests are group tests or rely almost completely on verbal ability. The Standford-Binet and Wechsler are well known tests given by a trained tester to only one person at a time. Individual tests, however, are not commonly given in school because they are so time consuming and costly. They have the advantage of enabling the person giving the test to appraise the testee's motivation and effort whereas on the group tests this is either impossible or very difficult to do. Some tests of this type take into consideration not only verbal ability, but performance as well. This latter feature is especially important to vocational teachers. We are all familiar with the youngsters who do inferior work in areas requiring verbal skill, but excel within our field of vocational instruction. Many of these students would have a high performance IQ. From this we may conclude that not all intelligence tests measure the same thing, or with an equal degree of efficiency. An IQ score without an understanding of the test from which it was derived is of dubious value.

ABOUT HALF of our population falls within the so-called average group of IQs, 90-110.[4] Vocational classes may be comprised of individuals with IQs above or below this range. Realizing that the IQ is a measure of only one portion of a person's real abilities, we should feel less concern with the IQ range of our classes. In fact, the IQ is not necessarily an indication of the contribution an individual may make to society.[5]

The picture drawn here of the IQ is not one of an accurate, infallible predictor. We have seen that it is inexact and some tests may be deficient in identifying vocational potential. We may well ask the question. "What use, if any, does the IQ have for vocational educators?" Other psychological tests, such as aptitude tests, should be used to supplement personal observation and other data.

We need to recognize the inadequacies of the IQ as a single measure of ability, and add to our knowledge of the individual through such information as his interests, his grades in school, the ability he demonstrates in specific vocational skills, his social activities, and the many other personal qualities that make for citizenship both in and out of school. With information secured from a variety of sources, including the IQ, we are in a position to evaluate our own effectiveness in motivating academic performance and to help the student make further educational and vocational plans.

IF SEVERAL intelligence tests reveal that the student is well above average but his school performance is well below average, we may infer that either the school is not adequately motivating the student or there are other factors affecting his performance. The student who has an above-average IQ needs neither to be encouraged or discouraged *on this one basis* from enrolling in vocational courses. Only after several facets of the individual's interests, aptitudes, and abilities have been explored can really effective educational and vocational guidance take place. The individual with a decidedly low IQ and demonstrated inferior academic ability cannot profit from vocational instruction as commonly offered in the high school. Individuals in this category generally are most happy and successful in those jobs where job preparation is of short duration and is offered by the employer.

Perhaps the most serious abuse of the IQ occurs in its use as a means of ability grouping. We have seen that it cannot be used to predict ability of individuals in all the various subject matter areas common to our high school curriculums. When used as the basis for ability grouping, both the student and school suffer.

When the characteristics and limitations of the IQ and intelligence tests are recognized, educators are better able to help students plan and participate in educational programs that meet the oft-repeated goals of education.

NOTES

[1]Jane Warters, *Techniques of Counseling*, New York: McGraw-Hill Book Co., 1954, Pp. 36, 37.

[2]David Ausubel, *Theory and Problems of Child Development*, New York: Grune and Stratton, 1958. P. 593.

[3]Laurence Shaffer and Edward Shoben, *The Psychology of Adjustment*, Boston: Houghton-Mifflin Company, 1956. Pp. 345, 346.

[4]J. M. Stephens, *Educational Psychology*, New York: Henry Holt and Company, 1956. P. 123.

[5]Cronbach, *Essentials of Psychological Testing*, New York: Harper, 1949. P. 123.

ELECTRICITY AND ELECTRONICS:

Why not emphasize the laboratory problem?

By Robert E. Jelinek

THIS IS AN ERA of electricity and electronics. More and more things are being done by electronics. Electronics today is in a state comparable with the radio industry immediately after World War I, when hundreds of companies began their struggle to become the technological giants they are today. Total revenue from all electronic sales and services came to $13.2 billion in 1958. It is expected to reach $14.6 billion during 1959.

With the invention of a new electronic language, with airlines making reservations by electronics and banks leaving their accounting to computors, with electronics guiding missiles and finding submarines and cooking meals, no one can say where it will ultimately sweep American technology and the American economy.

One thing is certain: if we are to continue to develop these fields, education must keep pace. We shall need increasingly large numbers of engineers, technicians, service people and skilled production workers. Automation in business and industry is replacing thousands of skilled and semi-skilled workers. This means that these displaced persons must be retrained and re-oriented and that training in their former occupations may be discontinued.

In addition to these changes, life in an electronic age will call for vastly increased general knowledge in the field of electricity and electronics on the part of every citizen.

HOW CAN the schools meet this challenge? The answer of course is not a simple one. The writer has heard teachers remark that we should shorten or discontinue courses in "electricity" and spend the time teaching "electronics." Obviously this is not the answer, because the electrical industry has also made tremendous progress in the introduction of new products and techniques. While these outcomes have perhaps been less spectacular in their appeal to the layman, they are nevertheless of tremendous importance and cannot be ignored.

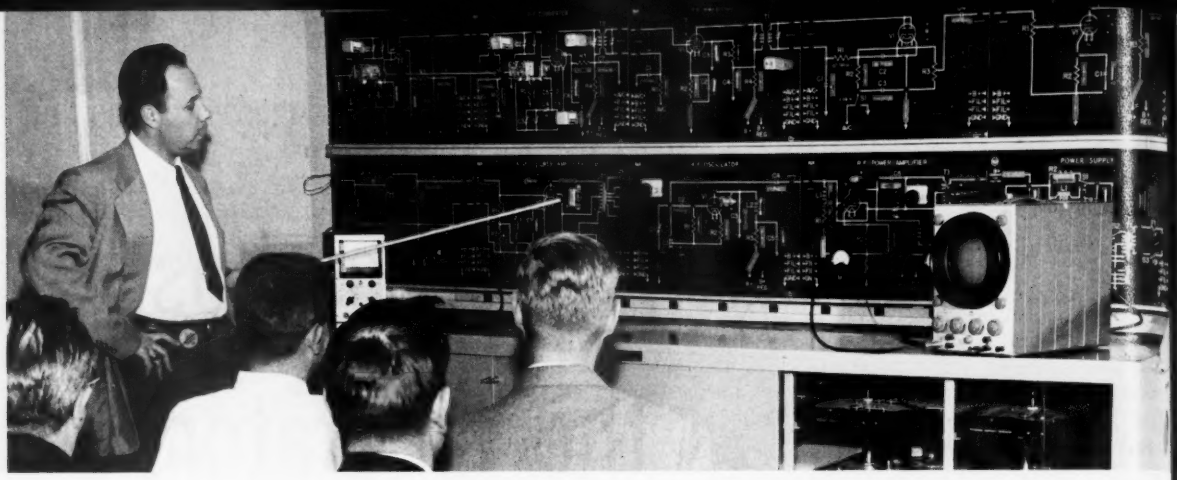
Since the science of electronics is but a special branch of electricity we must find ways and means to strengthen and improve our electric shop courses because they are basic and prerequisite to a study of electronics. For the same reasons we cannot demand more time in the curriculum at the expense of other subjects areas. All branches and phases of science and mathematics have become increasingly important—even the long neglected field of foreign language teaching becomes important when viewed in the light of our expanded global activities.

There is, however, one way open. We can *increase our efficiency*. This is meant in the scientific or mathematical concept of the word, i.e., the ratio of input to output. We must re-examine our courses and our techniques and methods so as to achieve the greatest value for the time, effort, and money available. Methods and practices must go which waste a student's time and effort on nonessential activities.

Mr. Jelinek is Assistant Director, Bureau of Industrial Arts and Technical Subjects, Chicago Public Schools.

THERE IS altogether too much emphasis in many of our high school electric shops on construction of a non-related nature. There is no excuse for the construction of a simple table lamp, for example, in a third or fourth year high school electric shop. This would be a legitimate project in a woodworking course or a general shop course at the seventh, eighth, or ninth grade level, because actually there is very little of an electrical nature in it. The proper connection and operation of a cord, plug, and lamp socket can be taught and demonstrated by the teacher, and all related information and manipulative skills learned by the student, in less than one hour.

Please note that the student has "learned by seeing it done," he has "learned by doing it," and he has experienced the satisfaction of achievement when he tested it as he plugged it into the line and saw it operate. The writer would be the first to admit the validity of these arguments. He also admits that the "project" method of teaching has certain values in motivating a student and stimulating his interest. "Take home" projects have the additional value, their proponents say, of having the boy construct something that is his very own. This is only true, however, if the project is well designed and is comparable with the commercial article, so that the boy can be



proud to take it home and exhibit it to his parents and friends. At best his interest is usually short-lived. After satisfying his need for recognition by showing off his project to his classmates and parents, he often loses interest. Students can hardly be considered so immature as to be motivated to the extent that everything they do and learn in a shop course must be in connection with a take-home project.

AN IDEAL SYSTEM for teaching electronics would be one in which the course of study was written to achieve a specific objective. It would be implemented by well-written laboratory manuals especially designed to demonstrate the principles embodied in the course of study in clear, concise steps arranged in a logical progression. A shop-laboratory, again especially designed and equipped with apparatus to teach the course efficiently, would complete this package deal.

Fortunately, tried and proved "package deals" such as the one described are on the commercial market and available to us. They had their inception during World War II when the government awarded contracts to several of our largest electronics manufacturing concerns to develop such systems to be used by the armed forces and industry to train electronics technicians. They have been improved since that time, and others have entered the field. All of them are being used in training programs by industry and the armed forces. They employ a combination of the best features of the physics-lab setup and the shop-lab setup. The physics laboratory usually employs laboratory apparatus which is simplified and easily understood, but which often bears little resemblance to the commercial article used in a series of experiments in which the emphasis is strictly theoretical. The shop laboratory, on the other hand, usually uses only commercial equipment, with emphasis on practical phases.

This material is reprinted from the September, 1959 issue of Illinois Vocational Progress through the courtesy of Editor R. K. Eden

ONE FEATURE of these so-called package deals is the teacher demonstration equipment and the other, the pupil participation equipment. A textbook, laboratory manual, and teacher's guide complete the package.

The demonstration equipment consists of a low cabinet in which a number of panels are racked up for storage. Mounted on top and at the back of the console storage cabinet is a rack on which the instructor can quickly mount the demonstration panels. These panels carry on their face schematic circuit diagrams in which the component parts are represented by conventional symbols. Mounted above each symbol is the actual component in its commercial form. The panels are large enough to be easily visible to an entire class and are prewired on the back so that while the front of the panel shows the schematic wiring diagram the circuit being wired is actually functional.

In this manner a teacher may discuss the theory of an electronic circuit and then demonstrate the circuit in operation quickly and efficiently. These demonstration panels are used in "building block" fashion to develop in a logical and progressive sequence all electronic circuits included in the course. At this point the student has heard a presentation of the theory of an electronic circuit. He has seen an actual demonstration of the circuit in operation. He has had the advantage of seeing the circuit in its simplified form and has a schematic diagram spread out over a comparatively large area with components in their commercial form.

The next step is for the student to duplicate this experiment by actually wiring the circuit at his bench, using the student-participation equipment and the laboratory manual as a guide. In some of the systems this phase consists of using the "bread board" or peg board type of unit components, and in others standard components are mounted and wired by the students in commercial rack and panel type equipment. Note that in both types not a minute of the student's time is wasted in useless construction or in soldering connections. All of the undesirable features of both the project method of teaching and the science laboratory method have been eliminated, such as unnecessary construction, repetitive soldering, tedious and lengthy written laboratory reports.

THE MOTIVATION and sustained interest so necessary for youths of high school age as supplied by the project method are also inherent in "package deal" systems, perhaps even to a greater extent. In both of these methods the boy "learns by doing." In both he experiences the gratifying experience of achievement. He sees something work and perform that he has actually built. With the modern system, however, he has this experience perhaps 50 or 60 times, whereas in the older project system he may experience this only once or twice, due to wasted time involved in construction.

This then may be the answer to our problem. This is how we may pack the vastly increased amount of learning demanded by the electronic age into the allotted span of time in our present curriculum.

19 Educators to Re-Write Georgia State Plan

Dr. Claude Purcell, Georgia State Superintendent of Schools, chose Labor Day weekend to announce the appointment of 19 Georgia educators to advise the State Department of Education in the re-writing of the State Plan for Vocational Education. This is the plan under which the Department allots federal money coming to Georgia for its six vocational education programs: agriculture, trade and industrial, home economics, distributive education, vocational office training, and industrial arts. The present program enrolls about 300,000 Georgians.

The superintendent said, "It is vital to our standard of living and the well-being of our people that we educate our people vocationally. By 1975, only 3 percent of the jobs in the labor market will be for unskilled labor. The remaining 97 percent will have to be people skillfully trained for their work."

The present State Plan for Vocational Education was adopted in 1941, when Georgia was still largely an agrarian state, the superintendent pointed out.

"Now that we are balancing industry and business with agriculture, we must re-design our Plan to serve the needs of all Georgians who seek to develop marketable skills with which to make a living. Great Georgians like Walter George, Dudley M. Hughes, Hoke Smith, and Brasswell Dean introduced the legislation that launched and maintained vocational education in this nation, and we take pride here in their home state in keeping our vocational education in the forefront of national educational progress."

Dr. Purcell said that Georgia's increasing industrial and business economy makes it imperative that more trade and industrial education be provided in the new plan. Already the Department and the State Board of Education have moved to set up a network of area trade schools serving several counties each. These will provide training in many vocational courses. Four of the schools are already being readied for operation: Rome, Augusta, Albany, and Columbus. The school chief pointed out that he wanted the vocational program to provide for workers in business and industry the same service that it has, through the years, provided for agriculture.

"Georgia will always need a good vocational agricultural program, because farming is basic; but we are gearing that, too, to the new age of mechanized farming, larger acreage, research in such things as insecticides, maintenance of farm machinery, and helping the farmer to learn new methods of marketing his product so as to get the best prices for it."

He said that in the area trade schools, there would be provision to teach youth and adults marketable skills in several of the present vocational education areas—agriculture, trade and industry, homemaking, distributive education, business, and industrial arts. There will also be courses in the vocational-technical training programs that have been set up under the new National Defense Education Act.

New industries coming into Georgia and existing businesses expanding constantly need well-trained workers. One of the magnets that draws industry into the state, Purcell commented, is the assurance of well-trained workers. He said that the need for good homemaking programs that

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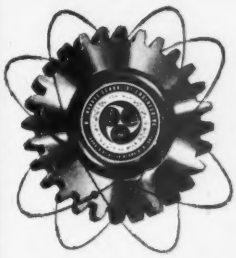

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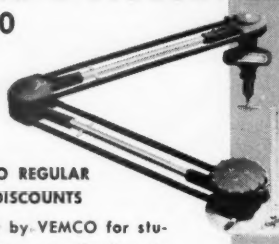

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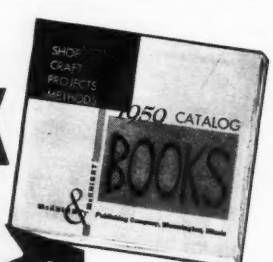

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include consumer research and management of home and job for women who work outside—is increasing because of the fact that 22½ million American women have outside jobs, and that a third of the new workers in the next decade will be women. Early marriage, too, makes it important that high school girls learn the basic skills of home management.

"Our vocational education teachers throughout the state have done excellent jobs through the years. It is on the foundations they have laid that we propose to expand the structure now to serve more and more Georgians. We believe that the new Plan will not only be a boon to industry and to workers, but it will help our schools to hold students, and do much to solve the present drop-out problem," the educator concluded. "The nineteen people I have asked to work with me on this Plan to submit to the State Board of Education know the background of vocational education, and have seen it in operation in Georgia. Many of them have helped develop it. They are well qualified to help us find ways to strengthen this program. It is our purpose to put a good vocational program, geared to the needs of the community, within reach of every Georgian who wants to develop marketable skills in the six fields our program covers."

The nineteen named to work on the revised State Plan are these: Dr. C. S. Hubbard, Atlanta, assistant state superintendent of schools, chairman, J. K. Brookshire, Danielsville, superintendent of the Madison county schools, J. J. Cordell, superintendent of the Albany schools, E. Russell Moulton, Lindale principal, J. L. Sharpe, principal of the Statesboro High School, Henry Stewart, Cedartown, vice-chairman of the State Board of Education, Dr. George O'Kelley of the University of Georgia faculty, Athens, Miss Inez Wallace, George Mulling, William Brady, Miss Fay Pilkenton, and Raymond Ginn, all of the State Department of Education, Atlanta. The last five are supervisors of vocational programs in the Vocational Division of the Department of Education. As consultants to the committee, Dr. Purcell named Frank Hughes, executive secretary of the Georgia Education Association, George I. Martin, director of vocational education in the Department of Education, W. J. Andrews, Toccoa, executive secretary of the Georgia School Board Members Association, Dr. Tom Quigley of Georgia Tech, T. G. Walters, state supervisor of vocational agriculture, W. M. Hicks, state supervisor of trade and industrial education, and Miss Mildred Jackson, state supervisor of distributive education.

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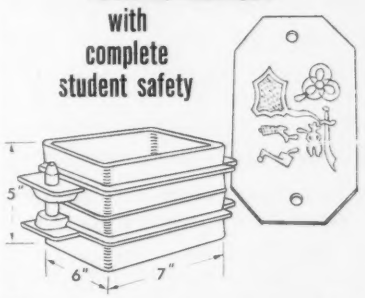

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NEW EDITIONS OF EDUCATIONAL PUBLICATIONS PREPARED BY PENNEY'S

Highlighting a series of educational guides published by the J. C. Penney Co. are the new editions of *Home Fashions and Fabrics, Fashions and Fabrics* and *Modern Fibers and Fabrics.* These and other publications totalling 23 are made available free of charge to accredited home economists throughout the United States. Publications for class room use have been prepared since 1921 by the Company's Consumer Services Department.

The publications, prepared under the direction of the department's head, F. R. Roberts, include information on new colors, fabrics, fashions, home decoration, clothing construction, kitchen tips and other aspects of home economics. Since trends and techniques in these fields change faster than time allows for text book preparation, Penny publications undergo constant revision to include all new information. Through surveys and field visits, Penney's home economists keep in touch with educators' needs and prepare them for publication. Editorial researchers gather information from laboratories, noted designers and specialists. Some of the publications have resulted directly from requests for information from teachers.

In the new fall issue of the annual publication, *Home Fashions and Fabrics,* are illustrated features on trends in colors and fabrics for the home, techniques in home decoration, tips on food preparation, new items to beautify the home and guidance in making quality purchases.

The fall issue of the semi-annual magazine *Fashions and Fabrics,* has a refreshing preview of fall fashions for '59 in ready-to-wear styles and patterns. Fall fabrics and colors are illustrated by swatches. The trend toward better proportioning of patterns to fit off-sized figures is covered.

The fourth revision of *Modern Fibers and Fabrics* will aid the instructor in her explanation of new synthetics. The teacher will find this information helpful in answering questions of where fabric comes from, how it is processed and how to take care of it.

The publication gives the complete history, processing, properties and uses of acetate, nylon, dacron, orlon and dynel. One section is devoted to the care of modern textiles as determined by the nature of the fiber, character of yarn, construction of fabric, finishing processes used and construction of the item itself.

Other magazines in the library are *Selecting the Correct Foundation Garments, Linings Double Fabric Construction, Handbook on Making Draperies, Slipcovers, Bedspreads* and *Consumer Buying Guide to Infants' Needs.* Also available is the new film strip, *Line in Your Wardrobe,* which shows the importance of line in creating a pleasing and harmonious appearance and ways of correcting figure faults through proper wardrobe selection.

Any of these free publications may be requested by accredited home economists through the manager of the local Penney store. In areas where no Penney store is accessible, requests may be sent to Consumer Services Department, J. C. Penney Co., 330 W. 34th St., N.Y. 1, N.Y.

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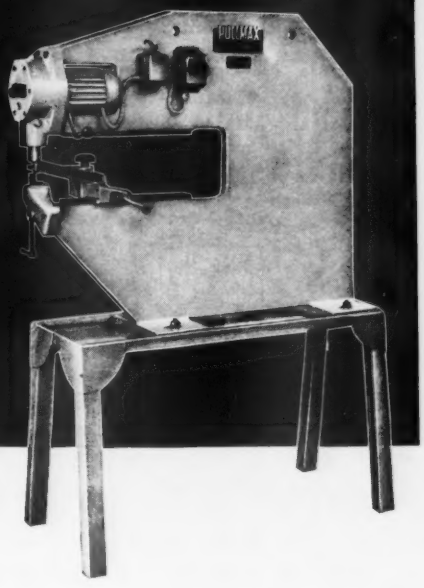

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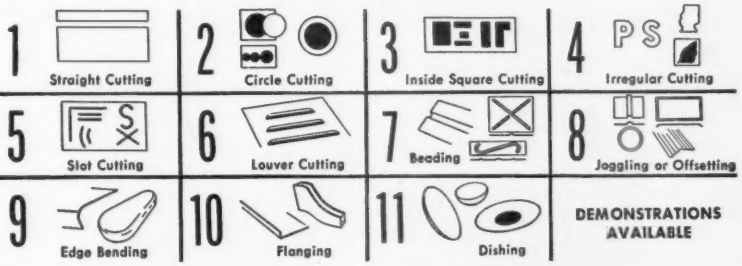

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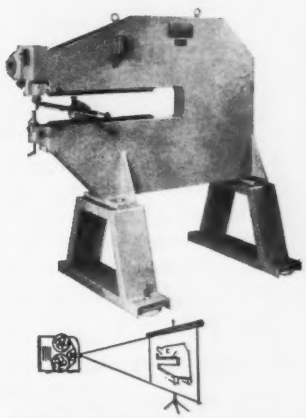

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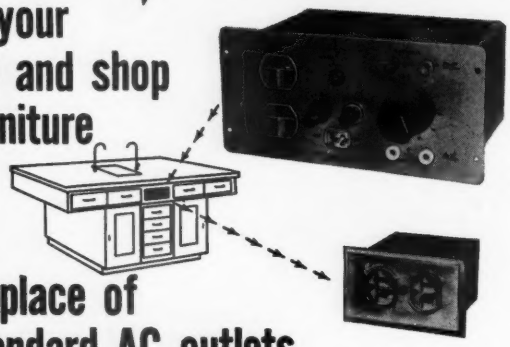

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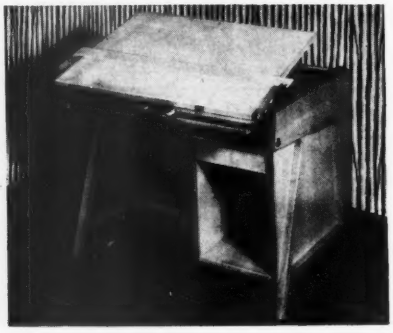

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SECRETARY MITCHELL ISSUES "FARM LABOR FACT BOOK"

"The farm laborer has been left behind as most Americans have advanced to better living and working conditions," Secretary of Labor James P. Mitchell said in announcing the release of a new Labor Department publication, the *Farm Labor Fact Book*, Oct. 18.

The publication is the third of a series on workers in the United States. It describes the many different groups that make up the farm work force, including operators, unpaid family workers, and hired labor. It gives employment trends, geographic distribution, and earnings and incomes of these groups, with special attention to migrant and foreign hired workers.

The Secretary cited figures showing the widening gap in wages and real earnings between hired farm and nonagricultural wage and salaried workers. While the hourly rate for farm workers rose from 1947 to 1957, their real annual earnings (excluding those of very casual workers) showed no significant increase because of the general decline in the number of days worked per year and the rising cost of living. Over the same period, the average hourly earnings of factory workers increased by two-thirds and their purchasing power rose by one-fourth.

Hired farm workers averaged 125 days of farm labor in 1957, receiving cash earnings of $738 a year. Many of them supplemented their income with nonfarm jobs. Including time spent in off-farm employment, they averaged 144 days of work in 1957. Their total cash earnings for the year averaged $892—lower than in any year since 1951.

Migratory farm workers earned an average of $859 in 1957 for 131 days of farm and nonfarm work. These workers occupy the lowest level of any major group in the American economy, Mr. Mitchell pointed out. "It is unbelievable," he said, "that the richest nation on earth can tolerate conditions met each day by these migrant workers—low wages, uncertain employment, inadequate housing, and hazardous transportation."

The *Farm Labor Fact Book* brings together, for the first time, hitherto widely scattered information on the farm labor force. Many of its figures are of historical significance.

Mr. Mitchell in his foreword expresses hope that the book will aid "in creating in the public consciousness a sympathetic understanding of the problems of farm manpower."

The new publication was based on statistics of the Labor and Agriculture Departments and of the Commerce Department's Bureau of the Census.

The *Fact Book* shows:

• The agricultural work force, which constituted 72 percent of the total U.S. work force in 1820, has declined steadily since then—to 9 percent in 1954. It has dropped from a total of 11½ million in 1910 to 6 million in 1954. The most significant reasons for this decline are increased farm mechanization, growing opportunities in nonfarm industries, the consolidation of small farms into larger operator units, and the drop in the size of farm families.

• The most outstanding users of hired labor are the large-scale farms. Comprising only 12 percent (583,000) of all farms, they accounted for $1.65 billion, or 72 percent, of all hired labor expenditures in 1954. They employed 54 percent of all hired farm workers when the 1954 census was taken.

• Approximately 400,000 persons engage in migratory farm work at some time during the year. This figure excludes some 150,000 dependents who travel with the migrant workers and some 150,000 dependents who stay at home. It also excludes some 450,000 foreign agricultural workers.

• Most agricultural workers imported into the United States are brought in under an international agreement between Mexico and the United States. They are employed under a standard contract which establishes conditions of employment. Chief users of this labor are Arizona, California, New Mexico, Texas, and Arkansas.

• Children make up a sizable group of farm workers. In July 1957, more than 1½ million children 10 to 15 years of age worked on farms.

* * *

More than 100 studies in vocational agricultural education are described in a new publication of the Office of Education.

Summaries of Studies in Agricultural Education, supplements other listings of studies in this field of education published by the Office of Education periodically since 1935.

Nearly 3,000 studies are described in the total series of publications issued by the Office of Education.

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CHICAGO EXHIBITS TO INCLUDE METHODS ON TRAINING THE BLIND

The Division of Services to the Blind, Office of Vocational Rehabilitation, Department of Health, Education, and Welfare, in cooperation with the Illinois Division of Vocational Rehabilitation, will occupy booth #160 in the exhibit hall at the 1959 AVA Convention. The feature attraction will be a continuous demonstration of methods of training blind persons in the use of metal working power tools. A regular vocational school instructor who has had many years of experience in training blind persons can be seen giving instruction to blind students on the punch press and lathe. There will also be a demonstration of the use of metal working hand tools. If any of the delegates and visitors to the convention have questions concerning the practicability of training blind persons to use this type of equipment, personnel at the booth will be glad to answer them. It is hoped that as many persons as possible will make it a point to observe this interesting demonstration.

* * *

Dr. Walter B. Jones, Director of Vocational Teacher Education, University of Pennsylvania, has returned to Italy after a brief vacation in the United States. Dr. Jones is on a two-year leave of absence from the University to serve as a consultant for the European Productivity Agency in establishing vocational teacher education programs in Italy and Greece.

GILBERT G. WEAVER FETED AT RETIREMENT

Gilbert G. Weaver, Director of the New York City Center of the New York State Industrial Teacher Training Division for the last 30 years was honored upon his retirement with a testimonial luncheon arranged by his friends and colleagues and held at the Hotel New Yorker May 9.

Mr. Weaver's long and distinguished service to vocational education includes more than 10 years as Chairman of AVA's Committee on Research and Publications, which he continues to head.

He is also a trustee of the New York Trade School, a member of the Board of Directors of the American Rehabilitation Ass'n., and Executive Vice President and Chairman of the Education Committee for the Iran Foundation.

The author of a number of texts that are widely used, Mr. Weaver directed the training of more than 2,000 teachers in his New York City capacity. He also trained teachers for vocational schools in Brazil when he was Consultant to the U. S. Dept. of Inter-American Affairs. Originally a machinist and toolmaker, he earned his BS and MA degrees at the University of Pittsburgh.

As we go to press, the Journal regrets to announce the death of Roy Fairbrother, AVA Vice President for Distributive Education, Oct. 9. Further details, next issue.

Dr. Elroy W. Bollinger has succeeded Gilbert G. Weaver as New York State Director of Industrial Teacher Training. Dr. Bollinger served New York State as Professor of Industrial Education for 20 years before returning to industry in 1956. Since then, he has worked as Director of Engineering Sales and Development for Airseco Associates of Long Island.

* * *

Idaho's Annual State Vocational Education Conference was held at Idaho State College, Pocatello, June 8-12. With State Director George E. Denman presiding, the opening session had as a main speaker Mack C. Corbett, Manager's Assistant for Information, U. S. Atomic Energy Commission. Divisional sessions featured workshops, committee reports, instructional programs and group meetings.

The Idaho Vocational Association program included general and executive sessions, a business meeting and the annual banquet. Representative Pete Cenarrusa, member of the Idaho House of Representatives and banquet speaker, reviewed the vocational program in connection with action of the 1959 Idaho state legislature. Special banquet guests were Bannock County legislators and others prominent in the development of the vocational program.

Special certificates of recognition were awarded to Mrs. Howard Maughn, Preston; James E. Graham, Rexburg; William R. Craner, Preston; Roy Christensen, Pocatello; and William R. Swenson, Boise. These persons were honored for their contributions to and their support and promotion of vocational education in Idaho in recent years.

* * *

The **Florida Vocational Association** has announced it has joined the ranks of AVA-Affiliated associations who employ the services of an Executive Secretary. **Jack P. McClellan** has been appointed to fill this newly-created position. Mr. McClellan will continue to serve also as Area Supervisor, Distributive Education and Cooperative Education, Florida State Department of Education, Tallahassee.

* * *

Carl J. Schaefer received the Doctor of Philosophy Degree at the June 12th commencement at the Ohio State University. His dissertation was entitled, *A Study To Determine A Master Plan For Post-secondary Vocational-technical Education for the State of Ohio.* Dr. Schaefer has been Assistant State Supervisor of Trade and Industrial Education, Ohio State Department of Education, for the past four years.

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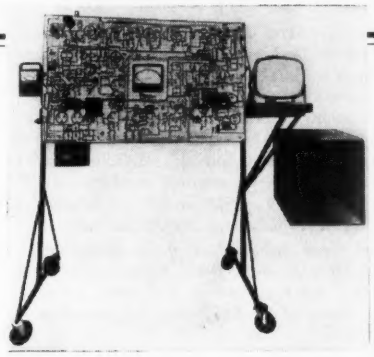

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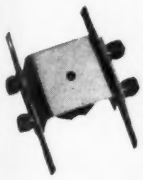

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The Connecticut State Department of Education, the Connecticut State Department of Public Works and the Citizens Committee of the **State Technical Institute, Norwalk, Conn.,** conducted ground-breaking ceremonies at the site of the new structure September 15.

Dr. Joseph T. Nerden, Chief, Bureau of Technical Institutes, introduced honored guests. Speakers included Timothy J. Murphy, Jr., Commissioner of Public Works; Dr. William J. Sanders, Commissioner of Education; Emmett O'Brien, Director, Division of Vocational Education; Irving C. Freese, Mayor, City of Norwalk; and Dr. Harry Becker, Superintendent of Schools in Norwalk.

* * *

Richard W. Hartmann, Acting Director, Department of Vocational Teacher Education, University of Pennsylvania, was program coordinator for the professional meetings in vocational and practical arts education that were held at the University during **Schoolmen's Week,** October 14-17.

Program speakers included Samuel W. Caplin, Director, Distributive Education Department, Temple University; Harvey A. Heintzelman, Career Information Specialist, Pennsylvania State Department of Public Instruction; John T. Shuman, Assistant to the Superintendent in Charge of Vocational and Adult Education, Allentown, Pa.; and Olga P. Brucher, President, American Home Economics Association.

Also, Rufus Jacoby, Industrial Arts Instructor, Coolidge Senior High School, Washington, D. C.; Charles Klein, Principal, Liberty High School, Bethlehem, Pa.; Robert A. Mellman, Director, Bureau of Curriculum Administration, Pennsylvania State Department of Public Instruction; and Richard S. Nelson, Specialist, Trade and Industrial Education, U. S. Office of Education.

* * *

The JOURNAL regrets to announce the death of 2/Lt. **Lee R. Beaty,** only son of Mr. and Mrs. **O. H. Beaty,** who was killed in a Twin Jet T-37 trainer crash near Babson Park, Fla., Sept. 25.

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VPI ANNOUNCES RETIREMENT OF MARTHA G. CREIGHTON

Martha G. Creighton, Professor and Head of Home Economics Education at Virginia Polytechnic Institute, Blacksburg, since 1949 retired in September.

A Past President of AVA and a recipient of the AVA Outstanding Service Award, Miss Creighton has served the Association in many capacities throughout her career. In commenting on her retirement, AVA Executive Secretary Dr. M. D. Mobley said:

"Martha Creighton's contributions to AVA and to the nation's programs of vocational education and home economics education are indeed countless. As President of AVA in 1953 she performed in a magnificent manner and contributed much to the profession in which she worked so devotedly through the years. There is scarcely a phase of our activities that has not been touched by her fine spirit, warmed by her contagious enthusiasm and tempered by her wise judgment."

A native of South Carolina, Miss Creighton was educated in Rock Hill public schools, Winthrop College and Columbia University where she earned both her bachelor's and master's degrees. Later she did advanced graduate work at Iowa State College.

She first taught home economics in South Carolina and several years later joined the staff of the Extension Service in that state. In 1920 she went to Virginia as Assistant State Supervisor of Home Economics, and in 1930 she was named State Supervisor.

Listed in *Who's Who in America* and *Who's Who of American Women*, Miss Creighton was the first President of the Virginia Vocational Association. She is also a member of the Virginia Home Economics Association and the American Home Economics Association.

Appointed to succeed Miss Creighton as Professor of Home Economics Education at VPI is **Beth C. Jordan** who for the past four years has served as District Supervisor of Home Economics in Southwestern Virginia—an area comprised of 18 counties, 82 schools, and 100 teachers.

Miss Jordan, who is a native of Virginia, earned her bachelor's degree at Madison College and her master's at the University of Tennessee. She is a past president of the Virginia Vocational Association and the Virginia Home Economics Association.

Miss Jordan has been succeeded as area supervisor by **Mrs. Eliza C. Grondon,** former home economics teacher at Bland High School, Bland, Va.

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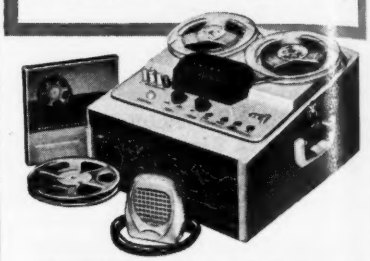

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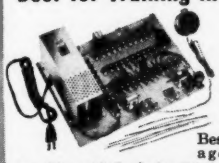

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Education and Military Leadership, A Study of the R. O. T. C., by Gene L. Lyons and John W. Masland. Princeton University Press, Princeton, New Jersey, 1959. 283 pages, $5.00.

The authors deal with the problem of the reevaluation of the R. O. T. C. in the context of the American educational system and conclude that civilian colleges and universities must begin to educate for the military as they do for other professions.

* * *

American Degree Mills by Robert H. Reid. American Council on Education, 1785 Mass. Ave., Washington 6, D. C., 1959. 100 pages, $1.00.

Degree mills are defined as institutions calling themselves colleges or universities which confer "quick-way," usually mail order, degrees on payment of a fee. In considering possible solutions to the problem this report reviews the efforts of many agencies, public and private to find an answer.

* * *

College Teaching by Television, edited by John C. Adams, C. R. Carpenter and Dorothy R. Smith. The American Council on Education, 1785 Mass. Ave., N. W., Washington 6, D. C. 235 pages, $4.00.

Recent experience has disclosed much precise information about the use of television for instructional purposes. This report of a conference sponsored jointly by the Committee on Television of the American Council on Education and the Pennsylvania State University at University Park, Pennsylvania, in 1957 will aid many who are considering the role of television in American education.

* * *

Store Salesmanship, by O. Preston Robinson, William R. Blackler and William B. Logan. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1959. 356 pages, $3.52.

The objective of this fifth edition is to help young men and women perform the important activities involved in modern selling. The contents of the book are based on practices that have proved successful in retail stores and on years of experience.

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Basic Bookbinding, by A. W. Lewis. Dover Publications, Inc., 920 Broadway, New York 10, N. Y., 1959. 144 pages, $1.35.

The author shows how anyone can bind paper back books in durable cloth and leather, with a few simple hand tools and some patience.

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Small-Group Discussion in Orientation and Teaching, by Randall W. Hoffmann and Robert Plutchik. G. P. Putnam's Sons, 210 Madison Ave., New York 16, N. Y.

Useful to college administrators and teachers at any level, this book explains the use of small-group discussion in conducting orientation classes and deals deeply and painstakingly with small-group leadership techniques, devices and philosophy as applied to the classroom situation.

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New Designs in Homemaking Programs in Junior High Schools, by Arleen C. Otto. Bureau of Publications, Teachers College, Columbia University, New York, N. Y., 1958. 100 pages, $3.50.

Creative ideas and emerging practices in home and family life education for young adolescent boys and girls are explored here. Ten program patterns are chosen to illustrate ways in which schools can give them experience to help to become more satisfactory family members.

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Living in Families, by Mollie Stevens Smart and Russell Cook Smart. Houghton Mifflin Co., 2 Park St., Boston, Mass., 1958. 433 pages.

Drawing on scientific knowledge gained from professional training as psychologists and specialists in child development, the authors cover several areas of family living in a changing world. The volume contains many handsome illustrations.

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Friendly Speeches and *Little Stories*. National Reference Library, 1468 West 9th St., Cleveland 13, Ohio. Approximately 50 pages each.

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